Early Spring 2016

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Upcoming Events:

- * Retzer Building Closed March 27
- * Earth Week April 17-23
- * Spring Sale & Workshop Event May 7

Check out the EE Activity Guide for classes and events offered through the year!

EE Activity Guide

Log on to www.waukeshacountyparks.gov for more information.

Ask a Biologist!

Here are a few questions that came my way since the last Center Line article.

1. There has been a lot in the news recently about coyotes. The TV news reporting left me with more questions than answers. Could you provide a biologists understanding of why the coyotes are attacking dogs, and is shouting and waving my arms a real solution? Also, why are coyotes being ear tagged and then released?

Perhaps the most significant influence on a coyote's behavior is its social ranking in the pack. Social ranking determines who defends the territory, eats first, and who gets to mate. For the many individual loners, hunger and avoiding the stronger coyote packs determines where and how far they go. During the mating period, January/February, the alpha male and female either defend their rank or lose it to other pack members or even a more powerful transient loner, and new pack begins. When coyotes spend at least part of their time in and around urban areas they become acclimated to buildings, roads, people and pets. In a study of urban coyotes in the greater Chicago area, Purdue University researchers have video showing that coyotes stop at and wait for street traffic lights to turn red before crossing busy intersections. These areas quickly become part of the coyotes' home territory. Garbage and pet food left outdoors becomes foraging resources for mice, rats, raccoons and coyotes. Coyotes will also eat the mice, rats and raccoons. Now that the coyote has a food source, territorial instincts become bolder, and behavior towards people and dogs can change. The thing to remember is that not all coyotes will become overly aggressive. Most commonly, it is the alpha male and/or female that will attack a small dog being walked on a leash by its owner. But, under the right conditions even a loner (a non-pack coyote) will make the most of an opportunity, such as a small dog left alone in a backyard. There are no quick and easy solutions, but the immediate response of shouting, arm waving, and throwing something at a coyote that approaches closely will scare it off, at least for a while.

If we look at the coyote population at the landscape scale, we see that just about all usable habitat already has coyotes there. Population estimates may come from winter track surveys, trapper and bow hunter surveys, scent stations with remote cameras, and university research projects. We can now take a lesson from farm and ranch situations, predation on sheep, calves, turkeys, etc. When coyote removal begins in earnest, the local coyotes can be taken out with reasonable efficiency. However, nature abhors a vacuum, and the area will rapidly be colonized by neighboring coyote packs. The more we learn about a species the better we can predict its behavior. In general, those who work with coyotes, from trappers to university professors, know that not all coyotes are equally smart, or acclimated to humans, or aggressive. With this insight, a plan to identify and selectively remove only the most problematic individuals will have the greatest effect. By live trapping, ear-tagging, and radio-collaring, it will become apparent which individuals need control. Another goal of this method is to prevent the alpha pair from teaching this behavior (showing no fear of humans and killing dogs) to their pups. During late summer and early autumn the pups have reached near-adult size, an-

dare beginning to hunt seriously for the first time. They have chased smaller mammals ever since they could run, but now things are different. They are perfecting their killing techniques. About 8 years ago, I spoke with an organic farmer in Walworth County who had 200 free ranging chickens. In less than a two week period over 110 chickens were killed by coyotes. I remember another incident in southwest Wisconsin, about 25 years ago, in which 61 sheep were killed by coyotes in one night. To give a reasonable amount of permanency to this control method, annual



assessments and proactive predator control will be necessary.

2. I treat my dogs to prevent heartworm, but how does heartworm effect coyotes?

First, canine heartworm (Dirofilaria immitis) is a parasite that can be found in a wide variety of wild mammals. The microscopic larvae of this parasite are transmitted from one infected mammal to another by a mosquito. Most mosquito species are capable of serving as a vector for the parasite. In a study in Illinois, 920 coyotes taken by hunters and trappers were examined for heartworm. Prevalence of heartworms statewide was 16%. The majority (78%) of coyotes had low infection rates (less than 12 heartworms). Body weight, bone marrow fat and kidney fat were not correlated with the presence of heartworms. Only about 4% of the coyotes had heavy infection rates (more than 24 heartworms) and showed a decline in the fur quality, with some of the females showing a decline in fertility. In conclusion, the prevalence and intensity of heartworm in coyotes have changed little in past 20 years, and that heartworm infections play only a minor role in influencing coyote population dynamics.

THE LAST PRAIRIE

The Natural Communities of Retzer Nature Center

With its elevation changes, different human uses, and different human restorations, the acres of Retzer make up a mantle of many colors. In this episode, we attempt to show you this land as a conglomeration of its natural communities. There is a color-coded map, and descriptions below matching the colors. Granted, this is not nearly so simple. Some of these communities have little pockets or patches of fen, prairie, or some other cover like a nursery or plantation. Sometimes, it all depends on whether you're a lumper or a splitter. Also, the natural management of our land is beginning to change it; some of these descriptions were more accurate three years ago. We will revisit our management plan as things progress, and update as needed.

Unless specified, all following community descriptions mirror the *Wisconsin Natural Heritage Inventory Recognized Natural Communities Working Document*, which largely follows Curtis' *Vegetation of Wisconsin*. Other names and definitions are from the Southeast Wisconsin Regional Planning Commission (SEWRPC). Third, some are designated by us; Waukesha County Parks (WCP). We needed some oddball designations for highly-disturbed sites, so we created some of our own. Mostly, we did not invent these and most are accepted in the natural resources field. You should note that we have two shades for Agricultural Field, making our Hayfield (just south of the Vista Prairie) gray instead of black. The harvest dates are strictly governed for bird nesting success, and it is a more-functional natural community than other farm fields.

That's about it for now. The community descriptions are below, and a map with color key is at the end. Until next time, please enjoy this sweeping overview of Retzer's ecology.

NATURAL COMMUNITY DESCRIPTIONS

Agricultural Field (Gray/Black)—WCP: Land currently farmed.

Dry-Mesic Prairie (Gold): This grassland community occurs on slightly less droughty sites than Dry Prairie and has many of the same grasses, but taller species such as Big Bluestem (*Andropogon gerardi*) and Indian-grass (*Sorghastrum nutans*) dominate. Needle Grass (*Stipa spartea*) may also be present. The herb component is more diverse than in Dry Prairies, including many species that occur in both Dry and Mesic Prairies.

Oak Opening (Light Green): As defined by Curtis, this is an oak-dominated savanna community in which there is less than 50% tree canopy. Historically, oak openings occurred on wet-mesic to dry sites. The few extant remnants are mostly on drier sites, with the mesic and wet-mesic openings almost totally destroyed by conversion to agricultural or residential uses, and by the encroachment of other woody plants due to fire suppression. Bur, White, and Black Oaks (*Quercus macrocarpa, Q. alba* and *Q. velutina*) are dominant in mature stands as large, opengrown trees with distinctive limb architecture. Shagbark Hickory (*Carya ovata*) is sometimes present. American Hazelnut (*Corylus americana*) is a common shrub, and while the herb layer is similar to those found in oak forests and prairies, with many of the same grasses and forbs present, there are some plants and animals that reach their optimal abundance in the "openings".

Old-Field (Beige)—WCP: While we label this as our title, we did not invent Old-Fields. This term is commonly used in the natural resources profession to describe these open lands. They are mostly old farming or CRP fields, now fallow or abandoned. Former hay fields or tilled land planted into permanent cover are dominated by non-native cool-season grasses, and will usually contain less invasives. We could separate this category further by moisture gradient, but we believe this unnecessary.

Plantation (Purple)—WCP: Usually in rows, these are planted by people for a specific purpose. Pine Plantations were created for harvest, but also for cover to revive, restore, or heal land.

Prairie Fen (Light Blue)—**SEWRPC:** This sub-classification is described by Dr. Donald Reed as a Fen with definite groundwater flow, but one that shows significant water table drawdown in mid to late summer. The vegetation composition is a blend of Calcareous Fen and Wet Prairie. Some of the Fen-specialist species and **Calciphiles** (plants that require alkaline soil or water flow) are usually absent. Retzer's Brown's Fen is an example.

Southern Dry-Mesic Forest (Dark Green): Red Oak (*Quercus rubra*) is a common dominant tree of this upland forest community type. White Oak (Q. alba), Basswood (*Tilia americana*), Sugar and Red Maples (*Acer saccharum* and *A. rubrum*), and White Ash (Fraxinus americana) are also important. The herbaceous understory flora is diverse and includes many species listed under Southern Dry Forest plus Jack-in-the-pulpit (*Arisaema triphyllum*), Enchanter's-nightshade (*Circaea lutetiana*), Large-flowered Bellwort (*Uvularia grandiflora*), Interrupted Fern (*Osmunda claytoniana*), Lady Fern (*Athyrium Filix-femina*), Tick-trefoils (*Desmodium glutinosum* and *D. nudiflo-rum*), and Hog Peanut (*Amphicarpa bracteata*). To the detriment of the oaks, **mesophytic** (plants that like more moisture and less fire—Mesic Forest species) tree species are becoming increasingly important under current management practices and fire suppression policies.

Shallow Marsh (Blue)—**SEWRPC/USFWS:** Standing water throughout much of the growing season generally greater than 1' deep (until vegetation transitions to Deep Marsh and/or completely submergent). Includes emergent vegetation (also usually Cattail-dominant), floating, floating-leaved, and a small component of submergent vegetation; both persistent and non-persistent.

Thicket (Brown)—**WCP**: Thickets are sites so dense with shrubs or small trees, other vegetation has difficulty growing or establishing. The existing woody plants may be native, but more commonly consist of invasive species that choke out everything else. The overall height is lower than a Woodlot, which has mature trees and a tall canopy.

Woodlot (Olive Green)—**WCP**: We created this category for land colonized by tree species that do not resemble any southern forest community in species composition, and/or structure. Where Plantations are humaninstalled, Woodlots are naturally colonized, or mostly so. Usually, an Old-Field or other open area is bordered by planted evergreens not native to the county, which invade the plot. We may also classify dense stands of native species as Woodlots. If the site begins to evolve into a defined system, we will change the designation. As in Old fields, there is no need to subdivide these by soil drainage. In economics, this term also applies to a small, wooded area capable of some production (maple syrup, lumber, pulp).

NATURAL COMMUNITIES AT RETZER NATURE CENTER MAP KEY

Open Areas

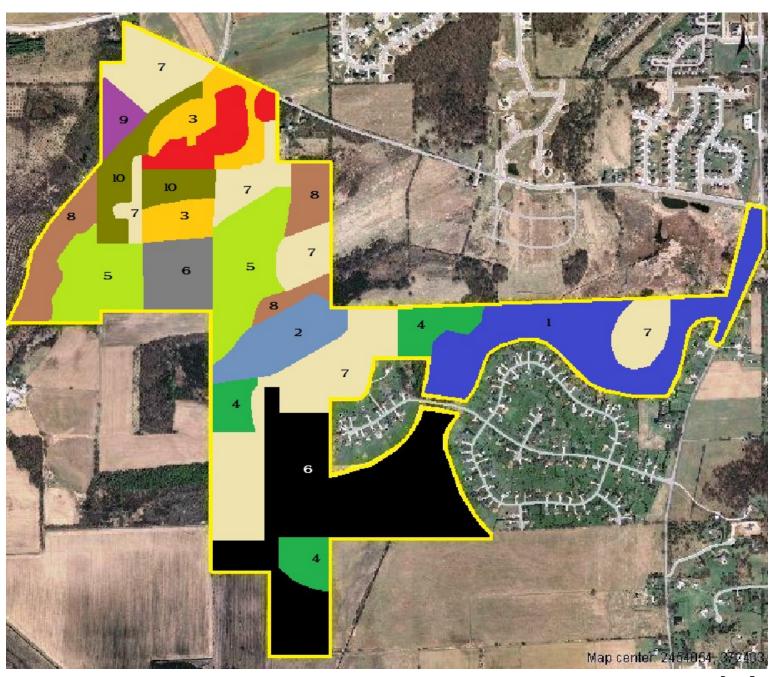
- 1. Shallow Marsh—BLUE
- 2. Prairie Fen—LIGHT BLUE
- 3. Dry-Mesic Prairie—GOLD

Shaded Areas

- 4. (Southern) Dry-Mesic Forest—GREEN
- 5. Oak Opening—LIGHT GREEN

Atypical Areas

- 6. Agricultural Field—GRAY/BLACK
- 7. Old-Field—BEIGE
- 8. Thicket—BROWN
- 9. Plantation—PURPLE
- 10. Woodlot—OLIVE GREEN



Upcoming Events

Early Spring

SPRING SALE & WORKSHOP EVENT

Saturday May 7

9 am—1 pm

Come get ready to tackle your Spring gardens. The Plant Doctors, UW-Extension Master Gardens, Composting, Rain Garden & Rain Barrel Experts will be on hand to assist you with your questions.

Retzer Rangers

Ages 5-7

Fee: \$4

Monday, April 11

"April Showers Bring May Flowers"

Wee Wonders

Ages 2-4

Fee: \$4

Tuesday, April 12

"The Scents of Spring"

Native Plant Pre-Order Sale Now thru April 20 **Order form**

Family Adventure Hikes - Saturdays

Fee: \$4.00

March 26 8:30 - 10 am 9 - 11 am April 2 10 - 11:30 am April 9 April 30 9 - 11 am



Earth Week Celebration April 17-23

Canoe Outing - Sunday, April 17 Green Cleaning Workshop - Tues, April 19 Raptors - Tuesday, April 19

Preschool Hike-Thursday, April 21 Friday Morning Bird Hike - Friday, April 22 Earth Week Finale - Saturday, April 23

For more information and schedule of eventswww.waukeshacounty.gov/retzernaturecenter





Return Service Requested

Friends of Retzer Nature Center

The Friends of Retzer Nature Center is a registered, 501 (c)3, organization dedicated to encouraging, perpetuating, and promoting the work of conservation and natural resource education.

The organization seeks the involvement of the community in the form of financial and volunteer support to work toward the continued growth and improvement of Retzer Nature Center. If you would like to become a member or view some of our projects and activities, please visit our web site at http://FriendsOfRetzer.org.

What's Up at Retzer?

The staff have been busy brainstorming new programs for the upcoming year.

Here is a sneak preview of what to expect.

Spring will focus on the Adult.

Spring Sale and Workshop Event

Welcome the full flowering of spring! Come get ready to tackle your spring gardens as we present our native plant sales and workshop classes. Let us help to answer some of your questions, just ask the Plant Doctors, UW– Extension Master Gardeners, Composting, Rain Garden and Rain Barrels experts to learn all you need to know to get your gardens off to a good and healthy start.



Saturday, May 7 from 9 am—1 pm Pre order plants until April 20.

Mom' Day Out

Offers busy parents the opportunity to come walk the trails with a naturalist after they have gotten the kids off to school. Everyone is welcome to join in this new workout class.

Class meets on March 16, April18 and May 11 at 9am. Fee is \$4 per class

<u>Summer brings a host of new programs for children ages 6-12 year olds.</u>

Cool World of Nature

Gives kids a chance to explore the grounds with a naturalist as they discover everything from the tiniest of insects to the largest trees in the woods. The program is not afraid to get kids dirty, wet or to have blast getting out to explore.

Class is held on Mondays, June 20,27, July 11, 25, August 1, & 8 from 1:30-3pm. Fee is \$6 per class

Retzer Summer Games

Celebrate the Summer Games—Retzer style. Our version gives a new twist to the "Olympic Games " as children are challenged to expand their knowledge and skills throughout the week long course. Earn a ring each day by completing our "Eco-letic" events. Sneak peak: archery is on target for one of the rings.

Class is held on July 18-22 from 12 -3 pm. Fee is \$60 per child.

